

REMARKS

Claims 1-28 are pending. The Examiner objected to the title of the application as imprecise. However, the Applicants respectfully disagree. The title currently corresponds to the independent claims in their current form and is believed descriptive of the content included in the specification. For example, independent claim 1 and the specification relates to a programmable chip system including a streaming output peripheral. The streaming output peripheral can be configured in a variety of manners. The title corresponds to the independent claims and reads as "Streaming Output Peripherals For Programmable Chip Systems."

The title is believed appropriate. Independent claims 1, 17, and 24 were rejected under 35 U.S.C. 102(b) as being anticipated by Inaba (4,396,987).

Inaba describes a "machine tool and robot control apparatus ... adapted to perform various tasks such as attaching and detaching of a workpiece to and from the lathe LM, changing of tools, cleaning of scraps and so forth. A controller locker CTL incorporates a numerical control device for controlling the lathe and a robot control device for controlling the industrial robot. A work feeder WF is adapted to feed unworked workpieces" (col 2, line 60 – col 3, line 2). No programmable chip is mentioned. No programmable chip system including a processor and a memory is mentioned. No streaming output peripheral is connected to a memory on the programmable chip.

The independent claims recite a memory and a processor included on a programmable chip. The independent claims also recite a streaming output peripherals connected to memory on the programmable chip. Inaba only describes a board, not a programmable chip, such as a Field Programmable Gate Array (FPGA) or a Complex Programmable Logic Device (CPLD). "In the conventional system shown in FIG. 2A, the numerical control device NC and the robot control device RC each incorporate a high-capacity, non-volatile data memory DMN, DMR, and each is connected to its own external memory device (tape puncher PTP, cassette type magnetic tape EM). The processor (not shown) in each control device successively reads out the machining data or robot command data from the associated data memory DMN or DMR and performs the numerical control processing or the robot control processing. Also, in order to execute the same control processing at some future date, the machining data in the data memory DMN is punched and stored in the paper tape by means of the paper tape puncher PTP, while the robot command

data in the data memory DMR is entered and stored in the cassette type magnetic tape EM" (col 3, lines 37-53).

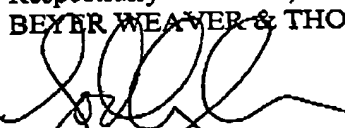
Nor would it be obvious to simply implement the Inaba system on a programmable chip. The Inaba system board requires a "tape reader" PTR and a "tape puncher" PTP (Fig 3) to be connected to a bus that is connected to the processor MPUN, the nonvolatile data memory DMN, and the working memory WMN. "The machining program punched in the paper tape is read by the tape reader PTR and stored in the non-volatile data memory DMN."

Furthermore, dependent claims 2, 18, and 25 recite a simultaneous multiple primary component fabric. A bus as described in Inaba is not a simultaneous multiple primary component fabric. A conventional bus does not allow multiple primary components access at the same time. By contrast, the techniques of the present invention provide a arbitration fabric that allows a primary component to access a secondary component at the same time a another primary component on the same fabric is accessing another secondary component. Inaba describes no such mechanism.

CONCLUSION

In light of the above remarks relating to the independent claims, the remaining dependent claims are believed allowable for at least the reasons noted above. Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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